

## SEQUENCE LISTING

<110> Leukotech A/S

<120> Pro-inflammatory and anti-inflammatory antibodies against the heparin binding protein (HBP)

<130> P818 PC00

<160> 589

<170> PatentIn version 3.1

<210> 1

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<212> PRT

<213> Homo sapiens

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Ala Arg Phe Val Met Thr Ala Ala Ser Cys Phe Gln Ser Gln Asn Pro  
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Gly Val Ser Thr Val Val Leu Gly Ala Tyr Asp Leu Arg Arg Arg Glu  
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Arg Gln Ser Arg Gln Thr Phe Ser Ile Ser Ser Met Ser Glu Asn Gly  
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Tyr Asp Pro Gln Gln Asn Leu Asn Asp Leu Met Leu Leu Gln Leu Asp

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Thr	Gly	Val	Leu	Thr	Arg	Arg	Gly	Gly	Ile	Cys	Asn	Gly	Asp	Gly	Gly
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Thr	Pro	Leu	Val	Cys	Glu	Gly	Leu	Ala	His	Gly	Val	Ala	Ser	Phe	Ser
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<210> 24

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Leu Ile His Ala

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His Ala Arg Phe

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&lt;400&gt; 29

Arg Phe Val Met

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&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

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&lt;223&gt; Peptide fragment: amino acid residues 35-38 of hHBP

&lt;400&gt; 30

Phe Val Met Thr

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&lt;210&gt; 31

&lt;211&gt; 4

&lt;212&gt; PRT

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Gln Asn Pro Gly

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Asn Pro Gly Val

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Ala Tyr Asp Leu

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Gln Ser Arg Gln

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Ser Arg Gln Thr

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Gly Tyr Asp Pro

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Ala Asn Leu Thr

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Asn Leu Thr Ser

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Leu Thr Ser Ser

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Thr Ser Ser Val

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<210> 98

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&lt;400&gt; 104

Pro Leu Pro Leu

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Leu Pro Leu Gln

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&lt;211&gt; 4

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<223> Peptide fragment: amino acid residues 114-117 of hHBP

<400> 109

Asn Ala Thr Val

1

<210> 110

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 115-118 of hHBP

<400> 110

Ala Thr Val Glu

1

<210> 111

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 116-119 of hHBP

<400> 111

Thr Val Glu Ala

1

<210> 112

<211> 4

<212> PRT

<213> Artificial sequence

<220>



<223> Peptide fragment: amino acid residues 117-120 of hHBP

<400> 112

Val Glu Ala Gly  
1

<210> 113

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 118-121 of hHBP

<400> 113

Glu Ala Gly Thr  
1

<210> 114

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 119-122 of hHBP

<400> 114

Ala Gly Thr Arg  
1

<210> 115

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 120-123 of hHBP

<400> 115

Gly Thr Arg Cys  
1

<210> 116

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 121-124 of hHBP

<400> 116

Thr Arg Cys Gln  
1

<210> 117

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 122-125 of hHBP

<400> 117

Arg Cys Gln Val  
1

<210> 118

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 123-126 of hHBP

<400> 118

Cys Gln Val Ala

1

<210> 119

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 124-127 of hHBP

<400> 119

Gln Val Ala Gly

1

<210> 120

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 125-128 of hHBP

<400> 120

Val Ala Gly Trp

1

<210> 121

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 125-128 of hHBP

<400> 121

Ala Gly Trp Gly  
1

<210> 122

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 127-130 of hHBP

<400> 122

Gly Trp Gly Ser  
1

<210> 123

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 128-131 of hHBP

<400> 123

Trp Gly Ser Gln  
1

<210> 124

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 129-132 of hHBP

<400> 124

Gly Ser Gln Arg  
1

<210> 125

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 130-133 of hHBP

<400> 125

Ser Gln Arg Ser  
1

<210> 126

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 131-134 of hHBP

<400> 126

Gln Arg Ser Gly  
1

<210> 127

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 132-135 of hHBP

<400> 127

Arg Ser Gly Gly  
1

<210> 128

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 133-136 of hHBP

<400> 128

Ser Gly Gly Arg  
1

<210> 129

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 134-137 of hHBP

<400> 129

Gly Gly Arg Leu  
1

<210> 130

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 135-138 of hHBP

<400> 130

Gly Arg Leu Ser

1

<210> 131

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 136-139 of hHBP

<400> 131

Arg Leu Ser Arg

1

<210> 132

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 137-140 of hHBP

<400> 132

Leu Ser Arg Phe

1

&lt;210&gt; 133

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 138-141 of hHBP

&lt;400&gt; 133

Ser Arg Phe Pro

1

&lt;210&gt; 134

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 139-142 of hHBP

&lt;400&gt; 134

Arg Phe Pro Arg

1

&lt;210&gt; 135

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 140-143 of hHBP

&lt;400&gt; 135



Phe Pro Arg Phe  
1

<210> 136

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 141-144 of hHBP

<400> 136

Pro Arg Phe Val  
1

<210> 137

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 142-145 of hHBP

<400> 137

Arg Phe Val Asn  
1

<210> 138

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 143-146 of hHBP

<400> 138

Phe Val Asn Val  
1

<210> 139

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 144-147 of hHBP

<400> 139

Val Asn Val Thr  
1

<210> 140

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 145-148 of hHBP

<400> 140

Asn Val Thr Val  
1

<210> 141

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 146-149 of hHBP

<400> 141

Val Thr Val Thr  
1

<210> 142

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 147-150 of hHBP

<400> 142

Thr Val Thr Pro  
1

<210> 143

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 148-151 of hHBP

<400> 143

Val Thr Pro Glu  
1

<210> 144

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 149-152 of hHBP

<400> 144

Thr Pro Glu Asp  
1

<210> 145

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 150-153 of hHBP

<400> 145

Pro Glu Asp Gln  
1

<210> 146

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 151-154 of hHBP

<400> 146

Glu Asp Gln Cys  
1

<210> 147

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 152-155 of hHBP

<400> 147

Asp Gln Cys Arg  
1

<210> 148

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 153-156 of hHBP

<400> 148

Gln Cys Arg Pro  
1

<210> 149

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 154-157 of hHBP

<400> 149

Cys Arg Pro Asn  
1

<210> 150

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 155-158 of hHBP

<400> 150

Arg Pro Asn Asn  
1

<210> 151

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 156-159 of hHBP

<400> 151

Pro Asn Asn Val  
1

<210> 152

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 157-160 of hHBP

<400> 152

Asn Asn Val Cys  
1

<210> 153

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 158-161 of hHBP

<400> 153

Asn Val Cys Thr  
1

<210> 154

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 159-162 of hHBP

<400> 154

Val Cys Thr Gly  
1

<210> 155

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 160-163 of hHBP

<400> 155

Cys Thr Gly Val  
1

<210> 156

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 161-164 of hHBP

<400> 156

Thr Gly Val Leu

1

<210> 157

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 162-165 of hHBP

<400> 157

Gly Val Leu Thr

1

<210> 158

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 163-166 of hHBP

<400> 158

Val Leu Thr Arg

1



<210> 159

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 164-167 of hHBP

<400> 159

Leu Thr Arg Arg  
1

<210> 160

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 165-168 of hHBP

<400> 160

Thr Arg Arg Gly  
1

<210> 161

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 166-169 of hHBP

<400> 161

Arg Arg Gly Gly

1

&lt;210&gt; 162

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 167-170 of hHBP

&lt;400&gt; 162

Arg Gly Gly Ile

1

&lt;210&gt; 163

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 168-171 of hHBP

&lt;400&gt; 163

Gly Gly Ile Cys

1

&lt;210&gt; 164

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 169-172 of hHBP

&lt;400&gt; 164

Gly Ile Cys Asn

1

<210> 165

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 170-173 of hHBP

<400> 165

Ile Cys Asn Gly

1

<210> 166

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 171-174 of hHBP

<400> 166

Cys Asn Gly Asp

1

<210> 167

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 172-175 of hHBP

<400> 167

Asn Gly Asp Gly

1

<210> 168

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 173-176 of hHBP

<400> 168

Gly Asp Gly Gly

1

<210> 169

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 174-177 of hHBP

<400> 169

Asp Gly Gly Thr

1

<210> 170

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 175-178 of hHBP

<400> 170

Gly Gly Thr Pro  
1

<210> 171

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 176-179 of hHBP

<400> 171

Gly Thr Pro Leu  
1

<210> 172

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 177-180 of hHBP

<400> 172

Thr Pro Leu Val  
1

<210> 173

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 178-181 of hHBP

<400> 173

Pro Leu Val Cys  
1

<210> 174

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 179-181 of hHBP

<400> 174

Leu Val Cys Glu  
1

<210> 175

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 180-183 of hHBP

<400> 175

Val Cys Glu Gly  
1

<210> 176

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 181-184 of hHBP

<400> 176

Cys Glu Gly Leu  
1

<210> 177

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 182-185 of hHBP

<400> 177

Glu Gly Leu Ala  
1

<210> 178

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 183-186 of hHBP

<400> 178

Gly Leu Ala His  
1

<210> 179

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 184-187 of hHBP

<400> 179

Leu Ala His Gly  
1

<210> 180

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 185-188 of hHBP

<400> 180

Ala His Gly Val  
1

<210> 181

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 186-189 of hHBP

<400> 181

His Gly Val Ala  
1

<210> 182

<211> 4



<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 187-190 of hHBP

<400> 182

Gly Val Ala Ser

1

<210> 183

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 188-191 of hHBP

<400> 183

Val Ala Ser Phe

1

<210> 184

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 189-192 of hHBP

<400> 184

Ala Ser Phe Ser

1

<210> 185

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 190-193 of hHBP

<400> 185

Ser Phe Ser Leu

1

<210> 186

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 191-194 of hHBP

<400> 186

Phe Ser Leu Gly

1

<210> 187

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 192-195 of hHBP

<400> 187

Ser Leu Gly Pro

1

<210> 188

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 193-196 of hHBP

<400> 188

Leu Gly Pro Cys

1

<210> 189

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 194-197 of hHBP

<400> 189

Gly Pro Cys Gly

1

<210> 190

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 195-198 of hHBP

<400> 190

Pro Cys Gly Arg

1

&lt;210&gt; 191

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 196-199 of hHBP

&lt;400&gt; 191

Cys Gly Arg Gly

1

&lt;210&gt; 192

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 197-200 of hHBP

&lt;400&gt; 192

Gly Arg Gly Pro

1

&lt;210&gt; 193

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 198-201 of hHBP

&lt;400&gt; 193

Arg Gly Pro Asp  
1

<210> 194

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 199-202 of hHBP

<400> 194

Gly Pro Asp Phe  
1

<210> 195

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 200-203 of hHBP

<400> 195

Pro Asp Phe Phe  
1

<210> 196

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 201-204 of hHBP

<400> 196

Asp Phe Phe Thr  
1

<210> 197

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 202-205 of hHBP

<400> 197

Phe Phe Thr Arg  
1

<210> 198

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 203-206 of hHBP

<400> 198

Phe Thr Arg Val  
1

<210> 199

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 204-207 of hHBP

<400> 199

Thr Arg Val Ala  
1

<210> 200

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 205-208 of hHBP

<400> 200

Arg Val Ala Leu  
1

<210> 201

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 206-209 of hHBP

<400> 201

Val Ala Leu Phe  
1

<210> 202

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 207-210 of hHBP

<400> 202

Ala Leu Phe Arg  
1

<210> 203

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 208-211 of hHBP

<400> 203

Leu Phe Arg Asp  
1

<210> 204

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 209-212 of hHBP

<400> 204

Phe Arg Asp Trp  
1

<210> 205

<211> 4

<212> PRT



<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 210-213 of hHBP

<400> 205

Arg Asp Trp Ile

1

<210> 206

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 211-214 of hHBP

<400> 206

Asp Trp Ile Asp

1

<210> 207

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 212-215 of hHBP

<400> 207

Trp Ile Asp Gly

1

<210> 208

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 213-216 of hHBP

<400> 208

Ile Asp Gly Val  
1

<210> 209

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 214-217 of hHBP

<400> 209

Asp Gly Val Leu  
1

<210> 210

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 215-218 of hHBP

<400> 210

Gly Val Leu Asn  
1

<210> 211

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 216-219 of hHBP

<400> 211

Val Leu Asn Asn  
1

<210> 212

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 217-220 of hHBP

<400> 212

Leu Asn Asn Pro  
1

<210> 213

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 218-221 of hHBP

<400> 213

Asn Asn Pro Gly  
1

<210> 214

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 219-222 of hHBP

<400> 214

Asn Pro Gly Pro  
1

<210> 215

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 220-223of hHBP

<400> 215

Pro Gly Pro Gly  
1

<210> 216

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 221-224 of hHBP

<400> 216

Gly Pro Gly Pro  
1

<210> 217

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 222-225 of hHBP

<400> 217

Pro Gly Pro Ala

1

<210> 218

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 3-6 of hHBP

<400> 218

Gly Gly Arg Lys

1

<210> 219

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 4-7 of hHBP

<400> 219

Gly Arg Lys Ala  
1

<210> 220

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 5-8 of hHBP

<400> 220

Arg Lys Ala Arg  
1

<210> 221

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 6-9 of hHBP

<400> 221

Lys Ala Arg Pro  
1

<210> 222

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 3-6 of pHBP

<400> 222

Gly Gly Arg Arg  
1

<210> 223

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 4-7 of pHP

<400> 223

Gly Arg Arg Ala  
1

<210> 224

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 5-8 of pHP

<400> 224

Arg Arg Ala Gln  
1

<210> 225

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 6-9 of pHBP

<400> 225

Arg Ala Gln Pro

1

<210> 226

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 7-10 of pHBP

<400> 226

Ala Gln Pro Gln

1

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<211> 4

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<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 8-11 of pHBP

<400> 227

Gln Pro Gln Glu

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<210> 228

<211> 4

<212> PRT

<213> Artificial sequence



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<400> 228

Pro Gln Glu Phe

1

<210> 229

<211> 4

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<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 10-13 of pHPB

<400> 229

Gln Glu Phe Pro

1

<210> 230

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 11-14 of pHPB

<400> 230

Glu Phe Pro Phe

1

<210> 231

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 12-15 of pHBP

<400> 231

Phe Pro Phe Leu  
1

<210> 232

<211> 4

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<220>

<223> Peptide fragment: amino acid residues 13-16 of pHBP

<400> 232

Pro Phe Leu Ala  
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<210> 233

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<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 21-24 of pHBP

<400> 233

Gln Gly Arg Pro  
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<210> 234

<211> 4

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<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 22-25 of pHBP

<400> 234

Gly Arg Pro Phe

1

<210> 235

<211> 4

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<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 23-26 of pHBP

<400> 235

Arg Pro Phe Cys

1

<210> 236

<211> 4

<212> PRT

<213> Artificial sequence

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<400> 236

Pro Phe Cys Ala

1

<210> 237

<211> 4

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<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 25-28 of pHBP

<400> 237

Phe Cys Ala Gly  
1

<210> 238

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 26-29 of pHBP

<400> 238

Cys Ala Gly Ala  
1

<210> 239

<211> 4

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<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 27-30 of pHBP

<400> 239

Ala Gly Ala Leu  
1

<210> 240

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 28-31 of pHPB

<400> 240

Gly Ala Leu Val

1

<210> 241

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 29-32 of pHPB

<400> 241

Ala Leu Val His

1

<210> 242

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 30-33 of pHPB

<400> 242

Leu Val His Pro

1

<210> 243

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 31-34 of pHBP

<400> 243

Val His Pro Arg

1

<210> 244

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 32-35 of pHBP

<400> 244

His Pro Arg Phe

1

<210> 245

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 17-20 of pHBP

<400> 245

Ser Ile Gln Lys

1

<210> 246

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 34-37 of pHPB

<400> 246

Arg Phe Val Leu

1

<210> 247

<211> 4

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<213> Artificial sequence

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<400> 247

Phe Val Leu Thr

1

<210> 248

<211> 4

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<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 36-39 of pHPB

<400> 248

Val Leu Thr Ala  
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<210> 249

<211> 4

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<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 37-40 of pHBP

<400> 249

Leu Thr Ala Ala  
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<210> 250

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 41-44 of pHBP

<400> 250

Ser Cys Phe Arg  
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<210> 251

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 42-45 of pHBP



<400> 251

Cys Phe Arg Gly  
1

<210> 252

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 43-46 of pHBP

<400> 252

Phe Arg Gly Lys  
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<210> 253

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 44-47 of pHBP

<400> 253

Arg Gly Lys Asn  
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<210> 254

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 45-48 of pHPB

<400> 254

Gly Lys Asn Ser  
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<210> 255

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 46-49 of pHPB

<400> 255

Lys Asn Ser Gly  
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<210> 256

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 47-50 of pHPB

<400> 256

Asn Ser Gly Ser  
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<210> 257

<211> 4

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<220>

<223> Peptide fragment: amino acid residues 48-51 of pHBP

<400> 257

Ser Gly Ser Ala

1

<210> 258

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 49-52 of pHBP

<400> 258

Gly Ser Ala Ser

1

<210> 259

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 50-53 of pHBP

<400> 259

Ser Ala Ser Val

1

<210> 260

<211> 4

<212> PRT

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<223> Peptide fragment: amino acid residues 51-54 of pHBP

<400> 260

Ala Ser Val Val

1

<210> 261

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 52-55 of pHBP

<400> 261

Ser Val Val Leu

1

<210> 262

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 59-62 of pHBP

<400> 262

Asp Leu Arg Gln

1

<210> 263

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 60-63 of pHBP

<400> 263

Leu Arg Gln Gln

1

<210> 264

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 61-64 of pHBP

<400> 264

Arg Gln Gln Glu

1

<210> 265

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 62-65 of pHBP

<400> 265

Gln Gln Glu Gln

1

<210> 266

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 63-66 of pHBP

<400> 266

Gln Glu Gln Ser  
1

<210> 267

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 64-67 of pHBP

<400> 267

Glu Gln Ser Arg  
1

<210> 268

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 18-21 of pHBP

<400> 268

Ile Gln Lys Gln  
1

<210> 269

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 70-73 of pHBP

<400> 269

Phe Ser Ile Arg

1

<210> 270

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 71-74 of pHBP

<400> 270

Ser Ile Arg Ser

1

<210> 271

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 72-75 of pHBP

<400> 271

Ile Arg Ser Ile

1

<210> 272

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 73-76 of pHPB

<400> 272

Arg Ser Ile Ser

1

<210> 273

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 74-77 of pHPB

<400> 273

Ser Ile Ser Gln

1

<210> 274

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 75-78 of pHPB

<400> 274



Ile Ser Gln Asn  
1

<210> 275

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 76-79 of pHBP

<400> 275

Ser Gln Asn Gly  
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<210> 276

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 77-80 of pHBP

<400> 276

Gln Asn Gly Tyr  
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<210> 277

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 80-83 of pHBP

<400> 277

Tyr Asp Pro Arg  
1

<210> 278

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 81-84 of pHBP

<400> 278

Asp Pro Arg Gln  
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<210> 279

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 82-85 of pHBP

<400> 279

Pro Arg Gln Asn  
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<210> 280

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 83-86 of pHPB

<400> 280

Arg Gln Asn Leu

1

<210> 281

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 86-89 of pHPB

<400> 281

Leu Asn Asp Val

1

<210> 282

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 87-90 of pHPB

<400> 282

Asn Asp Val Leu

1

<210> 283

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 88-91 of pHBP

<400> 283

Asp Val Leu Leu

1

<210> 284

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 89-92 of pHBP

<400> 284

Val Leu Leu Leu

1

<210> 285

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 90-93 of pHBP

<400> 285

Leu Leu Leu Gln

1

<210> 286

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 96-99 of pHBP

<400> 286

Arg Glu Ala Arg  
1

<210> 287

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 97-100 of pHBP

<400> 287

Glu Ala Arg Leu  
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<210> 288

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 98-101 of pHBP

<400> 288

Ala Arg Leu Thr  
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<210> 289

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 99-102 of pHPB

<400> 289

Arg Leu Thr Pro

1

<210> 290

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 100-103 of pHPB

<400> 290

Leu Thr Pro Ser

1

<210> 291

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 101-104 of pHPB

<400> 291

Thr Pro Ser Val

1

<210> 292

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 102-105 of pHPB

<400> 292

Pro Ser Val Ala  
1

<210> 293

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 103-106 of pHPB

<400> 293

Ser Val Ala Leu  
1

<210> 294

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 104-107 of pHPB

<400> 294

Val Ala Leu Val  
1

<210> 295

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 105-108 of pHBP

<400> 295

Ala Leu Val Pro

1

<210> 296

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 106-109 of pHBP

<400> 296

Leu Val Pro Leu

1

<210> 297

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 107-110 of pHBP

<400> 297

Val Pro Leu Pro

1



<210> 298

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 108-111 of pHBP

<400> 298

Pro Leu Pro Pro  
1

<210> 299

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 109-112 of pHBP

<400> 299

Leu Pro Pro Gln  
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<210> 300

<211> 4

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<220>

<223> Peptide fragment: amino acid residues 110-113 of pHBP

<400> 300

Pro Pro Gln Asn  
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<210> 301

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 111-114 of pHBP

<400> 301

Pro Gln Asn Ala

1

<210> 302

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 112-115 of pHBP

<400> 302

Ala Gly Thr Asn

1

<210> 303

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 113-116 of pHBP

<400> 303

Gly Thr Asn Cys

1

<210> 304

<211> 4

<212> PRT

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<223> Peptide fragment: amino acid residues 114-117 of pHBP

<400> 304

Thr Asn Cys Gln

1

<210> 305

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 121-124 of pHBP

<400> 305

Asn Cys Gln Val

1

<210> 306

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 126-129 of pHBP

<400> 306

Gly Trp Gly Thr  
1

<210> 307

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 127-130 of pHBP

<400> 307

Trp Gly Thr Gln  
1

<210> 308

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 128-131 of pHBP

<400> 308

Gly Thr Gln Arg  
1

<210> 309

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 129-132 of pHBP

<400> 309

Thr Gln Arg Leu  
1

<210> 310

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 130-133 of pHBP

<400> 310

Gln Arg Leu Arg  
1

<210> 311

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 131-134 of pHBP

<400> 311

Arg Leu Arg Arg  
1

<210> 312

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 132-135 of pHBP

<400> 312

Leu Arg Arg Leu

1

<210> 313

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 133-136 of pHBP

<400> 313

Arg Arg Leu Phe

1

<210> 314

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 134-137 of pHBP

<400> 314

Arg Leu Phe Ser

1

<210> 315

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 135-138 of pHBP

<400> 315

Leu Phe Ser Arg  
1

<210> 316

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 136-139 of pHBP

<400> 316

Phe Ser Arg Phe  
1

<210> 317

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 139-142 of pHBP

<400> 317

Phe Pro Arg Val  
1

<210> 318

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 140-143 of pHBP

<400> 318

Pro Arg Val Leu

1

<210> 319

<211> 4

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<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 141-144 of pHBP

<400> 319

Arg Val Leu Asn

1

<210> 320

<211> 4

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<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 142-145 of pHBP

<400> 320

Val Leu Asn Val

1

<210> 321

<211> 4



<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 143-146 of pHBP

<400> 321

Leu Asn Val Thr  
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<210> 322

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 146-149 of pHBP

<400> 322

Thr Val Thr Ser  
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<210> 323

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 147-150 of pHBP

<400> 323

Val Thr Ser Asn  
1

<210> 324

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 148-151 of pHBP

<400> 324

Thr Ser Asn Pro

1

<210> 325

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 149-152 of pHBP

<400> 325

Ser Asn Pro Cys

1

<210> 326

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 150-153 of pHBP

<400> 326

Asn Pro Cys Leu

1

<210> 327

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 151-154 of pHBP

<400> 327

Pro Cys Leu Pro

1

<210> 328

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 152-155 of pHBP

<400> 328

Cys Leu Pro Arg

1

<210> 329

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 153-156 of pHBP

<400> 329

Leu Pro Arg Asp

1

&lt;210&gt; 330

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 154-157 of pHBP

&lt;400&gt; 330

Pro Arg Asp Met

1

&lt;210&gt; 331

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 155-158 of pHBP

&lt;400&gt; 331

Arg Asp Met Cys

1

&lt;210&gt; 332

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 156-159 of pHBP

&lt;400&gt; 332

Asp Met Cys Ile

1

<210> 333

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 160 of pHBP

<400> 333

Met Cys Ile Gly

1

<210> 334

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 158-161 of pHBP

<400> 334

Cys Ile Gly Val

1

<210> 335

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 159-162 of pHBP

<400> 335

Ile Gly Val Phe  
1

<210> 336

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 160-163 of pHBP

<400> 336

Gly Val Phe Ser  
1

<210> 337

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 161-164 of pHBP

<400> 337

Val Phe Ser Arg  
1

<210> 338

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 162-165 of pHPB

<400> 338

Phe Ser Arg Arg  
1

<210> 339

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 163-166 of pHPB

<400> 339

Ser Arg Arg Gly  
1

<210> 340

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 164-167 of pHPB

<400> 340

Arg Arg Gly Arg  
1

<210> 341

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 165-168 of pHBP

<400> 341

Arg Gly Arg Ile  
1

<210> 342

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 166-169 of pHBP

<400> 342

Gly Arg Ile Ser  
1

<210> 343

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 167-170 of pHBP

<400> 343

Arg Ile Ser Gln  
1

<210> 344

<211> 4

<212> PRT

<213> Artificial sequence



<220>

<223> Peptide fragment: amino acid residues 168-171 of pHBP

<400> 344

Ile Ser Gln Gly  
1

<210> 345

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 169-172 of pHBP

<400> 345

Ser Gln Gly Asp  
1

<210> 346

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 170-173 of pHBP

<400> 346

Gln Gly Asp Arg  
1

<210> 347

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 171-174 of pHBP

<400> 347

Gly Asp Arg Gly

1

<210> 348

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 172-175 of pHBP

<400> 348

Asp Arg Gly Thr

1

<210> 349

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 173-176 of pHBP

<400> 349

Arg Gly Thr Pro

1

<210> 350

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 177-180 of pHBP

<400> 350

Leu Val Cys Asn

1

<210> 351

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 178-181 of pHBP

<400> 351

Val Cys Asn Gly

1

<210> 352

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 179-182 of pHBP

<400> 352

Cys Asn Gly Leu

1

<210> 353

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 180-183 of pHBP

<400> 353

Asn Gly Leu Ala

1

<210> 354

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues181-184 of pHBP

<400> 354

Gly Leu Ala Gln

1

<210> 355

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 182-185 of pHBP

<400> 355

Leu Ala Gln Gly

1

<210> 356

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 183-186 of pHBP

<400> 356

Ala Gln Gly Val

1

<210> 357

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 184-187 of pHBP

<400> 357

Gln Gly Val Ala

1

<210> 358

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 187-190 of pHBP

<400> 358

Ala Ser Phe Leu

1

&lt;210&gt; 359

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 188-191 of pHBP

&lt;400&gt; 359

Ser Phe Leu Arg

1

&lt;210&gt; 360

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 189-192 of pHBP

&lt;400&gt; 360

Phe Leu Arg Arg

1

&lt;210&gt; 361

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 19-22 of pHBP

&lt;400&gt; 361

Gln Lys Gln Gly  
1

<210> 362

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 191-194 of pHBP

<400> 362

Arg Arg Arg Phe  
1

<210> 363

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 192-195 of pHBP

<400> 363

Arg Arg Phe Arg  
1

<210> 364

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 193-196 of pHBP

<400> 364

Arg Phe Arg Arg  
1

<210> 365

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 194-197 of pHBP

<400> 365

Phe Arg Arg Ser  
1

<210> 366

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 195-198 of pHBP

<400> 366

Arg Arg Ser Ser  
1

<210> 367

<211> 4

<212> PRT

<213> Artificial sequence

<220>



<223> Peptide fragment: amino acid residues 196-199 of pHPB

<400> 367

Arg Ser Ser Gly  
1

<210> 368

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 197-200 of pHPB

<400> 368

Ser Ser Gly Phe  
1

<210> 369

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 198-201 of pHPB

<400> 369

Ser Gly Phe Phe  
1

<210> 370

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 199-202 of pHPB

<400> 370

Gly Phe Phe Thr  
1

<210> 371

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 20-23 of pHPB

<400> 371

Lys Gln Gly Arg  
1

<210> 372

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 206-209 of pHPB

<400> 372

Leu Phe Arg Asn  
1

<210> 373

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 207-210 of pHBP

<400> 373

Phe Arg Asn Trp  
1

<210> 374

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 208-211 of pHBP

<400> 374

Arg Asn Trp Ile  
1

<210> 375

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 209-212 of pHBP

<400> 375

Asn Trp Ile Asp  
1

<210> 376

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 210-213 of pHBP

<400> 376

Trp Ile Asp Ser

1

<210> 377

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 211-214 of pHBP

<400> 377

Ile Asp Ser Val

1

<210> 378

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 212-214 of pHBP

<400> 378

Asp Ser Val Leu

1

<210> 379

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 213-216 of pHBP

<400> 379

Ser Val Leu Asn

1

<210> 380

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 216-219 of pHBP

<400> 380

Asn Asn Pro Pro

1

<210> 381

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 3-6 of hNLE

<400> 381

Gly Gly Arg Arg

1

<210> 382

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 4-7 of hNLE

<400> 382

Gly Arg Arg Ala  
1

<210> 383

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 5-8 of hNLE

<400> 383

Arg Arg Ala Arg  
1

<210> 384

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 6-9 of hNLE

<400> 384

Arg Ala Arg Pro  
1

<210> 385

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 7-10 of hNLE

<400> 385

Ala Arg Pro His

1

<210> 386

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 8-11 of hNLE

<400> 386

Arg Pro His Ala

1

<210> 387

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 9-12 of hNLE

<400> 387

Pro His Ala Trp

1

&lt;210&gt; 388

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 10-13 of hNLE

&lt;400&gt; 388

His Ala Trp Pro

1

&lt;210&gt; 389

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 11-14 of hNLE

&lt;400&gt; 389

Ala Trp Pro Phe

1

&lt;210&gt; 390

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 12-15 of hNLE



<400> 390

Trp Pro Phe Met  
1

<210> 391

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 13-16 of hNLE

<400> 391

Pro Phe Met Val  
1

<210> 392

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 14-17 of hNLE

<400> 392

Phe Met Val Ser  
1

<210> 393

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 15-18 of hNLE

<400> 393

Met Val Ser Leu  
1

<210> 394

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 16-19 of hNLE

<400> 394

Val Ser Leu Gln  
1

<210> 395

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 17-20 of hNLE

<400> 395

Ser Leu Gln Leu  
1

<210> 396

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 18-21 of hNLE

<400> 396

Leu Gln Leu Arg

1

<210> 397

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 19-22 of hNLE

<400> 397

Gln Leu Arg Gly

1

<210> 398

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 20-23 of hNLE

<400> 398

Leu Arg Gly Gly

1

<210> 399

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 21-24 of hNLE

<400> 399

Arg Gly Gly His  
1

<210> 400

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 22-25 of hNLE

<400> 400

Gly Gly His Phe  
1

<210> 401

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 23-26 of hNLE

<400> 401

Gly His Phe Cys  
1

<210> 402

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 25-28 of hNLE

<400> 402

Phe Cys Gly Ala  
1

<210> 403

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 26-29 of hNLE

<400> 403

Cys Gly Ala Thr  
1

<210> 404

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 27-30 of hNLE

<400> 404

Gly Ala Thr Leu  
1

<210> 405

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 28-31 of hNLE

<400> 405

Ala Thr Leu Ile  
1

<210> 406

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 29-32 of hNLE

<400> 406

Thr Leu Ile Ala  
1

<210> 407

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 30-33 of hNLE

<400> 407

Leu Ile Ala Pro  
1

<210> 408

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 31-34 of hNLE

<400> 408

Ile Ala Pro Asn  
1

<210> 409

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 32-35 of hNLE

<400> 409

Ala Pro Asn Phe  
1

<210> 410

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 32-36 of hNLE

<400> 410

Pro Asn Phe Val  
1

<210> 411

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 34-37 of hNLE

<400> 411

Asn Phe Val Met

1

<210> 412

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 35-38 of hNLE

<400> 412

Phe Val Met Ser

1

<210> 413

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 36-39 of hNLE

<400> 413

Val Met Ser Ala

1



<210> 414

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 37-40 of hNLE

<400> 414

Met Ser Ala Ala

1

<210> 415

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 38-41 of hNLE

<400> 415

Ser Ala Ala His

1

<210> 416

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 39-42 of hNLE

<400> 416

Ala Ala His Cys

1

<210> 417

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 40-43 of hNLE

<400> 417

Ala His Cys Val

1

<210> 418

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 41-44 of hNLE

<400> 418

His Cys Val Ala

1

<210> 419

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 42-45 of hNLE

<400> 419

Cys Val Ala Asn

1

<210> 420

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 43-36 of hNLE

<400> 420

Val Ala Asn Val

1

<210> 421

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 44-47 of hNLE

<400> 421

Ala Asn Val Asn

1

<210> 422

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 45-48 of hNLE

<400> 422

Asn Val Asn Val  
1

<210> 423

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 46-49 of hNLE

<400> 423

Val Asn Val Arg  
1

<210> 424

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 48-51 of hNLE

<400> 424

Val Arg Ala Val  
1

<210> 425

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 49-52 of hNLE

<400> 425

Arg Ala Val Arg  
1

<210> 426

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 50-53 of hNLE

<400> 426

Ala Val Arg Val  
1

<210> 427

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 51-54 of hNLE

<400> 427

Val Arg Val Val  
1

<210> 428

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 52-55 of hNLE

<400> 428

Arg Val Val Leu

1

<210> 429

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 55-58 of hNLE

<400> 429

Leu Gly Ala His

1

<210> 430

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 56-59 of hNLE

<400> 430

Gly Ala His Asn

1

<210> 431

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 57-60 of hNLE

<400> 431

Ala His Asn Leu

1

<210> 432

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 58-61 of hNLE

<400> 432

His Asn Leu Ser

1

<210> 433

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 59-62 of hNLE

<400> 433

Asn Leu Ser Arg

1

<210> 434

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 60-63 of hNLE

<400> 434

Leu Ser Arg Arg  
1

<210> 435

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 61-64 of hNLE

<400> 435

Ser Arg Arg Glu  
1

<210> 436

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 62-65 of hNLE

<400> 436

Arg Arg Glu Pro  
1

<210> 437



<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 63-66 of hNLE

<400> 437

Arg Glu Pro Thr

1

<210> 438

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 64-67 of hNLE

<400> 438

Glu Pro Thr Arg

1

<210> 439

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 65-68 of hNLE

<400> 439

Pro Thr Arg Gln

1

<210> 440

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 66-69 of hNLE

<400> 440

Thr Arg Gln Val

1

<210> 441

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 67-70 of hNLE

<400> 441

Arg Gln Val Phe

1

<210> 442

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 68-71 of hNLE

<400> 442

Gln Val Phe Ala

1

&lt;210&gt; 443

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 69-72 of hNLE

&lt;400&gt; 443

Val Phe Ala Val

1

&lt;210&gt; 444

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 70-73 of hNLE

&lt;400&gt; 444

Phe Ala Val Gln

1

&lt;210&gt; 445

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 71-74 of hNLE

&lt;400&gt; 445

Ala Val Gln Arg  
1

<210> 446

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 72-75 of hNLE

<400> 446

Val Gln Arg Ile  
1

<210> 447

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 73-76 of hNLE

<400> 447

Gln Arg Ile Phe  
1

<210> 448

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 74-77 of hNLE

<400> 448

Arg Ile Phe Glu

1

<210> 449

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 75-78 of hNLE

<400> 449

Ile Phe Glu Asp

1

<210> 450

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 76-79 of hNLE

<400> 450

Phe Glu Asp Gly

1

<210> 451

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 77-80 of hNLE

<400> 451

Glu Asp Gly Tyr  
1

<210> 452

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 78-81 of hNLE

<400> 452

Asp Gly Tyr Asp  
1

<210> 453

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 80-83 of hNLE

<400> 453

Tyr Asp Pro Val  
1

<210> 454

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 81-84 of hNLE

<400> 454

Asp Pro Val Asn

1

<210> 455

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 82-84 of hNLE

<400> 455

Pro Val Asn Leu

1

<210> 456

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 83-86 of hNLE

<400> 456

Val Asn Leu Leu

1

<210> 457

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 84-87 of hNLE

<400> 457

Asn Leu Leu Asn

1

<210> 458

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 85-88 of hNLE

<400> 458

Leu Leu Asn Asp

1

<210> 459

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 86-89 of hNLE

<400> 459

Leu Asn Asp Ile

1

<210> 460

<211> 4

<212> PRT



<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 87-90 of hNLE

<400> 460

Asn Asp Ile Val  
1

<210> 461

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 88-91 of hNLE

<400> 461

Asp Ile Val Ile  
1

<210> 462

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 89-92 of hNLE

<400> 462

Ile Val Ile Leu  
1

<210> 463

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 90-93 of hNLE

<400> 463

Val Ile Leu Gln

1

<210> 464

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 91-94 of hNLE

<400> 464

Ile Leu Gln Leu

1

<210> 465

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 92-95 of hNLE

<400> 465

Leu Gln Leu Asn

1

<210> 466

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 93-96 of hNLE

<400> 466

Gln Leu Asn Gly  
1

<210> 467

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 94-97 of hNLE

<400> 467

Leu Asn Gly Ser  
1

<210> 468

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 95-98 of hNLE

<400> 468

Asn Gly Ser Ala  
1

<210> 469

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 96-99 of hNLE

<400> 469

Gly Ser Ala Thr

1

<210> 470

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 97-100 of hNLE

<400> 470

Ser Ala Thr Ile

1

<210> 471

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 98-101 of hNLE

<400> 471

Ala Thr Ile Asn

1

&lt;210&gt; 472

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 99-102 of hNLE

&lt;400&gt; 472

Thr Ile Asn Pro

1

&lt;210&gt; 473

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 100-103 of hNLE

&lt;400&gt; 473

Ile Asn Pro Ser

1

&lt;210&gt; 474

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Peptide fragment: amino acid residues 101-104 of hNLE

&lt;400&gt; 474

Asn Pro Ser Val

1

<210> 475

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 102-105 of hNLE

<400> 475

Pro Ser Val Ala

1

<210> 476

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 103-106 of hNLE

<400> 476

Ser Val Ala Leu

1

<210> 477

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 104-107 of hNLE

<400> 477

Val Ala Leu Val  
1

<210> 478

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 105-108 of hNLE

<400> 478

Ala Leu Val Pro  
1

<210> 479

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 106-109 of hNLE

<400> 479

Leu Val Pro Leu  
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<210> 480

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 107-110 of hNLE

<400> 480

Val Pro Leu Pro  
1

<210> 481

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 108-111 of hNLE

<400> 481

Pro Leu Pro Ala  
1

<210> 482

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 109-112 of hNLE

<400> 482

Leu Pro Ala Gln  
1

<210> 483

<211> 4

<212> PRT

<213> Artificial sequence



<220>

<223> Peptide fragment: amino acid residues 110-113 of hNLE

<400> 483

Pro Ala Gln Gly

1

<210> 484

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 111-114 of hNLE

<400> 484

Ala Gln Gly Arg

1

<210> 485

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 112-115 of hNLE

<400> 485

Gln Gly Arg Arg

1

<210> 486

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 113-116 of hNLE

<400> 486

Gly Arg Arg Leu  
1

<210> 487

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 114-117 of hNLE

<400> 487

Arg Arg Leu Gly  
1

<210> 488

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 115-118 of hNLE

<400> 488

Arg Leu Gly Asn  
1

<210> 489

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 116-119 of hNLE

<400> 489

Leu Gly Asn Gly  
1

<210> 490

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 117-120 of hNLE

<400> 490

Gly Asn Gly Val  
1

<210> 491

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 118-121 of hNLE

<400> 491

Asn Gly Val Gln  
1

<210> 492

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 119-121 of hNLE

<400> 492

Gly Val Gln Cys  
1

<210> 493

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 120-123 of hNLE

<400> 493

Val Gln Cys Leu  
1

<210> 494

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 121-124 of hNLE

<400> 494

Gln Cys Leu Ala  
1

<210> 495

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 122-125 of hNLE

<400> 495

Cys Leu Ala Met  
1

<210> 496

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 123-126 of hNLE

<400> 496

Leu Ala Met Gly  
1

<210> 497

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 124-127 of hNLE

<400> 497

Ala Met Gly Trp  
1

<210> 498

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 125-128 of hNLE

<400> 498

Met Gly Trp Gly

1

<210> 499

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 126-129 of hNLE

<400> 499

Gly Trp Gly Leu

1

<210> 500

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 127-130 of hNLE

<400> 500

Trp Gly Leu Leu  
1

<210> 501

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 47-50 of hNLE

<400> 501

Asn Val Arg Ala  
1

<210> 502

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 128-131 of hNLE

<400> 502

Gly Leu Leu Gly  
1

<210> 503

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 129-132 of hNLE

<400> 503

Leu Leu Gly Arg  
1

<210> 504

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 130-133 of hNLE

<400> 504

Leu Gly Arg Asn  
1

<210> 505

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 131-134 of hNLE

<400> 505

Gly Arg Asn Arg  
1

<210> 506

<211> 4

<212> PRT

<213> Artificial sequence

<220>



<223> Peptide fragment: amino acid residues 132-135 of hNLE

<400> 506

Arg Asn Arg Gly  
1

<210> 507

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 133-136 of hNLE

<400> 507

Asn Arg Gly Ile  
1

<210> 508

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 134-137 of hNLE

<400> 508

Arg Gly Ile Ala  
1

<210> 509

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 135-138 of hNLE

<400> 509

Gly Ile Ala Ser  
1

<210> 510

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 136-139 of hNLE

<400> 510

Ile Ala Ser Val  
1

<210> 511

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 137-140 of hNLE

<400> 511

Ala Ser Val Leu  
1

<210> 512

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 138-141 of hNLE

<400> 512

Ser Val Leu Gln

1

<210> 513

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 139-142 of hNLE

<400> 513

Val Leu Gln Glu

1

<210> 514

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 140-143 of hNLE

<400> 514

Leu Gln Glu Leu

1

<210> 515

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 141-144 of hNLE

<400> 515

Gln Glu Leu Asn

1

<210> 516

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 142-145 of hNLE

<400> 516

Glu Leu Asn Val

1

<210> 517

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 143-146 of hNLE

<400> 517

Leu Asn Val Thr

1

<210> 518

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 145-148 of hNLE

<400> 518

Val Thr Val Val  
1

<210> 519

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 146-149 of hNLE

<400> 519

Thr Val Val Thr  
1

<210> 520

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 147-150 of hNLE

<400> 520

Val Val Thr Ser  
1

<210> 521

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 148-151 of hNLE

<400> 521

Val Thr Ser Leu

1

<210> 522

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 149-152 of hNLE

<400> 522

Thr Ser Leu Cys

1

<210> 523

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 150-153 of hNLE

<400> 523

Ser Leu Cys Arg

1

<210> 524

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 151-154 of hNLE

<400> 524

Leu Cys Arg Arg

1

<210> 525

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 152-155 of hNLE

<400> 525

Cys Arg Arg Ser

1

<210> 526

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 153-156 of hNLE

<400> 526

Arg Arg Ser Asn  
1

<210> 527

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 154-157 of hNLE

<400> 527

Arg Ser Asn Val  
1

<210> 528

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 155-158 of hNLE

<400> 528

Ser Asn Val Cys  
1

<210> 529

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 157-160 of hNLE



<400> 529

Val Cys Thr Leu  
1

<210> 530

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 158-161 of hNLE

<400> 530

Cys Thr Leu Val  
1

<210> 531

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 159-162 of hNLE

<400> 531

Thr Leu Val Arg  
1

<210> 532

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 160-163 of hNLE

<400> 532

Leu Val Arg Gly  
1

<210> 533

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 161-164 of hNLE

<400> 533

Val Arg Gly Arg  
1

<210> 534

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 162-165 of hNLE

<400> 534

Arg Gly Arg Arg  
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<210> 535

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 163-166 of hNLE

<400> 535

Gly Arg Arg Gly  
1

<210> 536

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 164-167 of hNLE

<400> 536

Arg Arg Gly Arg  
1

<210> 537

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 165-166 of hNLE

<400> 537

Arg Gly Arg Ile  
1

<210> 538

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 166-169 of hNLE

<400> 538

Gly Arg Ile Ser  
1

<210> 539

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 167-170 of hNLE

<400> 539

Arg Ile Ser Gln  
1

<210> 540

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 168-171 of hNLE

<400> 540

Ile Ser Gln Gly  
1

<210> 541

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 169-172 of hNLE

<400> 541

Ser Gln Gly Asp  
1

<210> 542

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 170-173 of hNLE

<400> 542

Gln Gly Asp Ser  
1

<210> 543

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 171-174 of hNLE

<400> 543

Gly Asp Ser Gly  
1

<210> 544

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 172-174 of hNLE

<400> 544

Asp Ser Gly Thr  
1

<210> 545

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 173-176 of hNLE

<400> 545

Ser Gly Thr Pro  
1

<210> 546

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 177-180 of hNLE

<400> 546

Leu Val Cys Asn  
1

<210> 547

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 178-181 of hNLE

<400> 547

Val Cys Asn Gly  
1

<210> 548

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 179-182 of hNLE

<400> 548

Cys Asn Gly Leu  
1

<210> 549

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 180-183 of hNLE

<400> 549

Asn Gly Leu Ile  
1

<210> 550

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 181-184 of hNLE

<400> 550

Gly Leu Ile His

1

<210> 551

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 182-185 of hNLE

<400> 551

Leu Ile His Gly

1

<210> 552

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 183-186 of hNLE

<400> 552



Ile His Gly Ile  
1

<210> 553

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 184-187 of hNLE

<400> 553

His Gly Ile Ala  
1

<210> 554

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 185-188 of hNLE

<400> 554

Gly Ile Ala Ser  
1

<210> 555

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 186-189 of hNLE

<400> 555

Ile Ala Ser Phe  
1

<210> 556

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 187-190 of hNLE

<400> 556

Ala Ser Phe Val  
1

<210> 557

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 188-191 of hNLE

<400> 557

Ser Phe Val Arg  
1

<210> 558

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 189-192 of hNLE

<400> 558

Phe Val Arg Gly  
1

<210> 559

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 190-103 of hNLE

<400> 559

Val Arg Gly Gly  
1

<210> 560

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 191-194 of hNLE

<400> 560

Arg Gly Gly Cys  
1

<210> 561

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 192-195 of hNLE

<400> 561

Gly Gly Cys Ala  
1

<210> 562

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 193-196 of hNLE

<400> 562

Gly Cys Ala Ser  
1

<210> 563

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 194-197 of hNLE

<400> 563

Cys Ala Ser Gly  
1

<210> 564

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 195-198 of hNLE

<400> 564

Ala Ser Gly Leu  
1

<210> 565

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 196-199 of hNLE

<400> 565

Ser Gly Leu Tyr  
1

<210> 566

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 197-200 of hNLE

<400> 566

Gly Leu Tyr Pro  
1

<210> 567

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 198-201 of hNLE

<400> 567

Leu Tyr Pro Asp  
1

<210> 568

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 199-202 of hNLE

<400> 568

Tyr Pro Asp Ala  
1

<210> 569

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 200-203 of hNLE

<400> 569

Pro Asp Ala Phe  
1

<210> 570

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 201-204 of hNLE

<400> 570

Asp Ala Phe Ala  
1

<210> 571

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 202-205 of hNLE

<400> 571

Ala Phe Ala Pro  
1

<210> 572

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 203-206 of hNLE

<400> 572

Phe Ala Pro Val  
1

<210> 573

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 204-207 of hNLE

<400> 573

Ala Pro Val Ala

1

<210> 574

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 205-208 of hNLE

<400> 574

Pro Val Ala Gln

1

<210> 575

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 206-209 of hNLE

<400> 575

Val Ala Gln Phe

1



<210> 576

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 207-210 of hNLE

<400> 576

Ala Gln Phe Val

1

<210> 577

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 208-211 of hNLE

<400> 577

Gln Phe Val Asn

1

<210> 578

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 209-212 of hNLE

<400> 578

Phe Val Asn Trp

1

<210> 579

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 210-212 of hNLE

<400> 579

Val Asn Trp Ile

1

<210> 580

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 211-214 of hNLE

<400> 580

Asn Trp Ile Asp

1

<210> 581

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 212-215 of hNLE

<400> 581

Trp Ile Asp Ser  
1

<210> 582

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 213-216 of hNLE

<400> 582

Ile Asp Ser Ile  
1

<210> 583

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 214-217 of hNLE

<400> 583

Asp Ser Ile Ile  
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<210> 584

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Peptide fragment: amino acid residues 214-218 of hNLE

<400> 584

Ser Ile Ile Gln  
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<210> 585

<211> 4

<212> PRT

<213> Artificial sequence

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<223> Peptide fragment: amino acid residues 43-46 of pHPB

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Pro Arg Phe Val  
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<210> 586

<211> 4

<212> PRT

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<223> Peptide fragment: amino acid residues 190-194 of pHPB

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Leu Arg Arg Arg  
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<210> 587

<211> 4

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Asn Pro Pro Ala  
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<210> 588

<211> 221

<212> PRT

<213> Sus sp.

<400> 588

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Ser Ile Gln Lys Gln Gly Arg Pro Phe Cys Ala Gly Ala Leu Val His  
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Pro Arg Phe Val Leu Thr Ala Ala Ser Cys Phe Arg Gly Lys Asn Ser  
35 40 45

Gly Ser Ala Ser Val Val Leu Gly Ala Tyr Asp Leu Arg Gln Gln Glu  
50 55 60

Gln Ser Arg Gln Thr Phe Ser Ile Arg Ser Ile Ser Gln Asn Gly Tyr  
65 70 75 80

Asp Pro Arg Gln Asn Leu Asn Asp Val Leu Leu Leu Gln Leu Asp Arg  
85 90 95

Glu Ala Arg Leu Thr Pro Ser Val Ala Leu Val Pro Leu Pro Pro Gln  
100 105 110

Asn Ala Thr Val Glu Ala Gly Thr Asn Cys Gln Val Glu Ala Gly Trp  
115 120 125

Gly Thr Gln Arg Leu Arg Arg Leu Phe Ser Arg Phe Pro Arg Val Leu  
130 135 140

Asn Val Thr Val Thr Ser Asn Pro Cys Leu Pro Arg Asp Met Cys Ile  
145 150 155 160

Gly Val Phe Ser Arg Arg Gly Arg Ile Ser Gln Gly Asp Arg Gly Thr  
165 170 175

Pro Leu Val Cys Asn Gly Leu Ala Gln Gly Val Ala Ser Phe Leu Arg  
180 185 190

Arg Arg Phe Arg Arg Ser Ser Gly Phe Phe Thr Arg Val Ala Leu Phe  
195 200 205

Arg Asn Trp Ile Asp Ser Val Leu Asn Asn Pro Pro Ala  
210 215 220

<210> 589

<211> 267

<212> PRT

<213> Homo sapiens

<400> 589

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Pro Ala Leu Leu Leu Gly Gly Thr Ala Leu Ala Ser Glu Ile Val Gly  
20 25 30

Gly Arg Arg Ala Arg Pro His Ala Trp Pro Phe Met Val Ser Leu Gln  
35 40 45

Leu Arg Gly Gly His Phe Cys Gly Ala Thr Leu Ile Ala Pro Asn Phe  
50 55 60

Val Met Ser Ala Ala His Cys Val Ala Asn Val Asn Val Arg Ala Val  
65 70 75 80

Arg Val Val Leu Gly Ala His Asn Leu Ser Arg Arg Glu Pro Thr Arg  
85 90 95

Gln Val Phe Ala Val Gln Arg Ile Phe Glu Asn Gly Tyr Asp Pro Val  
100 105 110

Asn Leu Leu Asn Asp Ile Val Ile Leu Gln Leu Asn Gly Ser Ala Thr  
 115 120 125

Ile Asn Ala Asn Val Gln Val Ala Gln Leu Pro Ala Gln Gly Arg Arg  
 130 135 140

Leu Gly Asn Gly Val Gln Cys Leu Ala Met Gly Trp Gly Leu Leu Gly  
 145 150 155 160

Arg Asn Arg Gly Ile Ala Ser Val Leu Gln Glu Leu Asn Val Thr Val  
 165 170 175

Val Thr Ser Leu Cys Arg Arg Ser Asn Val Cys Thr Leu Val Arg Gly  
 180 185 190

Arg Gln Ala Gly Val Cys Phe Gly Asp Ser Gly Ser Pro Leu Val Cys  
 195 200 205

Asn Gly Leu Ile His Gly Ile Ala Ser Phe Val Arg Gly Gly Cys Ala  
 210 215 220

Ser Gly Leu Tyr Pro Asp Ala Phe Ala Pro Val Ala Gln Phe Val Asn  
 225 230 235 240

Trp Ile Asp Ser Ile Ile Gln Arg Ser Glu Asp Asn Pro Cys Pro His  
 245 250 255

Pro Arg Asp Pro Asp Pro Ala Ser Arg Thr His  
 260 265